

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An object model for capturing information related to product innovation-related data, comprising:

a product idea interface for capturing an idea for a product in a product idea object;
and

a design alternative interface for capturing a plurality of design alternatives for said product in a plurality of respective design alternative objects;

a product requirement interface for capturing requirements for said product idea in product requirement objects; and

a product fulfillment interface which captures how well said product function fulfills said product requirements, wherein said product fulfillment interface further generates responses to queries related to levels of fulfillments of requirements encapsulated in product requirement objects by alternative designs encapsulated in design alternative objects.

2-4. (Cancelled)

5. (Original) An object model in accordance with claim 1, comprising:
a design representation interface for capturing a representation of said design alternative in a design representation object.

6. (Original) An object model in accordance with claim 1, comprising:
a decision interface for capturing a decision in a product requirement object, said decision relating to one of said product idea or said design alternative.

7. (Original) An object model in accordance with claim 1, wherein:
each of said product idea object and said design alternative objects are stored in a tool-neutral persistent form.

8. (Currently Amended) An object model in accordance with claim [[2]]1 comprising:

each of said product idea object, said design alternative objects, and said product requirement objects are stored in a tool-neutral persistent form.

9. (Original) An object model in accordance with claim 5, comprising:
each of said product idea object, said design alternative objects, and said design representation objects are stored in a tool-neutral persistent form.

10. (Currently Amended) A method for capturing information related to product innovation-related data, comprising:
capturing an idea for a product in a product idea object; ~~and~~
capturing a plurality of design alternatives for said product in a plurality of respective design alternative objects;
capturing requirements for said product idea in product requirement objects; and
generating responses, by a requirement fulfillment interface, to queries related to
levels of fulfillment of requirements encapsulated in product requirement objects by
alternative designs encapsulated in said plurality of design alternative objects.

11. (Cancelled)

12. (Currently Amended) A method in accordance with claim ~~[[11]]~~10, comprising:
capturing a function for fulfilling said product requirement in a product function object.

13. (Original) A method in accordance with claim 10, comprising:
capturing a representation of said design alternative in a design representation object.

14. (Original) A method in accordance with claim 10, comprising:
capturing a decision in a decision object, said decision relating to one of said product idea or said design alternative.

15. (Currently Amended) A method in accordance with claim ~~[[1]]~~10, comprising:
storing each of said product idea object and said design alternative objects in a tool-neutral persistent form.

16. (Currently Amended) A method in accordance with claim ~~[[11]]~~10, comprising:

storing each of said product idea object, said design alternative objects, and said product requirement objects in a tool-neutral persistent form.

17. (Original) A method in accordance with claim 13, comprising:
storing each of said product idea object, said design alternative objects, and said design representation objects in a tool-neutral persistent form.

18. (Currently Amended) A computer readable storage medium tangibly embodying program instructions implementing a method for capturing information related to product innovation-related data, the method comprising the steps of:

capturing an idea for a product in a product idea object; and
capturing a plurality of design alternatives for said product in a plurality of respective design alternative objects;

capturing requirements for said product idea in product requirement objects; and
generating responses, by a requirement fulfillment interface, to queries related to
levels of fulfillment of requirements encapsulated in product requirement objects by
alternative designs encapsulated in said plurality of design alternative objects.

19. (Previously Presented) The computer readable storage medium of claim 18, the method comprising:

storing each of said product idea object and said design alternative object in a tool-neutral persistent form.

20. (Currently Amended) The computer readable storage medium of claim 18, the method comprising:

~~capturing a requirement for said product idea in a product requirement object;~~

capturing a representation of said design alternative in a design representation object;

and

storing each of said product idea object, said design alternative object, said product requirement objects, and said design representation object in a separate relational database, wherein associations between each of said product idea object, said design alternative object, said product requirement objects, and said design representation object are captured using foreign keys.

21. (Currently Amended) A system for managing a product design process, the system comprising:

a product idea object encapsulating information related to a conception of a product being designed according to said product design process;

product requirement objects encapsulating requirements to be fulfilled by said product;

design alternative objects encapsulating multiple designs that represent a solution corresponding to said product idea object; and

a requirement fulfillment interface for ~~facilitating~~ processing queries related to levels of fulfillment of requirements encapsulated in said product requirement objects by alternative designs encapsulated in said design alternative objects.

22. (Previously Presented) The system of claim 21 wherein said product requirement objects encapsulate priority information and said requirement fulfillment interface processes said priority information to facilitate said queries.

23. (Previously Presented) The system of claim 21 further comprising:

a product requirement decision interface for storing and retrieving information associated with decisions related to requirements encapsulated within said product requirement objects.

24. (Previously Presented) The system of claim 21 further comprising:
product function objects encapsulating information associated with functionality of
design alternative objects corresponding to requirements encapsulated within the product
requirement objects.

25. (Previously Presented) The system of claim 24 further comprising:
a product function decision interface for storing and retrieving information associated
with decisions related to functionality selected for said design alternative objects.